

## ABSTRACT

An image reader for reading an image drawn on a paper or a sheet-like recording medium, an image processor provided with the image reader, such as a copying machine, a scanner and the like, and a fiber lens to be applied to those devices. The image processor has to be large in the whole size of device to read both sides of an original. Therefore, the image processor of the present invention comprises an image reader (10a) on the upper side of transport path and an image reader (10b) on the lower side of that respectively. In order to downsize the device, it is necessary to shorten the diameter of optical fiber (140) of the fiber lens (14) installed in the imager reader as light receiving means. In this case, the optical fiber (140) is provided with a light-absorbing layer 8(143) around of the optical fiber (140) in order to restrain the crosstalk and the flare phenomenon. The illuminance of light source means (15) installed in the image reader gets smaller as the device is downsized. In case where the illuminance is small, the image quality is deteriorated by the floating of the original. Accordingly, the image reader should be provided with the light source means so as to uniform the illuminance over a specific width of the main and sub scanning directions. Therefore, it is possible to avoid the deterioration of the image quality.